



December 28, 2000

Timothy G. Smith
Vice President. Power Development
Sunlaw Energy Corporation
P. O. Box 58324
Los Angeles, CA 90058

Dear Mr. Smith

NUEVA AZALEA POWER PLANT PROJECT DATA REQUESTS

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

This second set of data requests (#137-172) is being made in the areas of air quality, alternatives, traffic & transportation and visual. In the second set of requests, one request was inadvertently misnumbered. This round starts with the correct number. Written responses to the enclosed data requests are due to the Energy Commission staff on or before January 30, 2000, or at such later date as may be mutually agreed. Supplemental information for the first and second set of round of requests is due no later than January 16, 2000. The list of those responses still outstanding is attached.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, you must send a written notice to both Commissioner Robert Pernel, Presiding Committee Member for the Nueva Azalea Power Plant Project proceeding, and to me, within 15 days of receipt of this notice. The notification must contain the reasons for not providing the information, the need for additional time and the grounds for any objections (see Title 20, California Code of Regulations section 1716 (e)).

If you have any questions, please call me at (916) 653-1245, or E-mail me at jreede@energy.state.ca.us.

Sincerely,

James W. Reede, Jr.
Energy Facility Siting Project Manager

Enclosure

cc: POS

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**NUEVA AZALEA PROJECT
DATA REQUESTS
(00-AFC-3)**

Technical Area: Air Quality

Author: Guido Franco

BACKGROUND

As explained before (please see Data Requests 87 and 88) the cumulative impact analysis needs to include the impacts from new potential relevant new sources if they are under construction or if they are in the permitting process. We are pleased with the effort made by the Applicant trying to contact the pertinent cities inquiring for information on these new projects. However, it seems that the Applicant has not contacted the City of Downey. We are particularly interested in the assertion by the City of Downey in a letter sent to Mr. James Reede, Jr and dated July 25, 2000 that "there are several planned projects in Downey, including the Boeing Master Plan."

In the December 2000 response to Data Request 87 the Applicant says that the City of South Gate does not have information regarding the proposed expansion of the Blue Diamond facility. However, Staff received a draft traffic impact analysis from the City of South Gate that could be used to estimate air quality impacts from such expansion. SCAQMD has indicated to us that the expansion will not result in an increase in emissions from the facility but their analysis does not include non-permitted operations such as increase in vehicular traffic.

DATA REQUEST

137. Please provide information regarding the new and/or modified facilities. The information shall include hourly and daily emissions for NO_x, NO, CO, VOC, PM₁₀, and SO_x. Please also include, as much as possible, data regarding the location where these emissions would take place, and, if there are stacks, include the stack parameters needed for conventional air dispersion modeling analysis. In the case of mobile sources, please also include the data in a format needed for the CALINE model.
138. Please contact the City of Downey and inquire about the projects in their jurisdiction for which the City has enough information to allow their inclusion in the cumulative impact analysis. If such information is not available, please indicate so in your response and provide the name of your contact with the City of Downey.
139. Please confirm with the City of South Gate that the draft document entitled Traffic Impact Study. Blue Diamond Materials dated August 16, 2000 is still valid. If this is the case, or if there is a new draft or final version, please use the report to provide the information needed for the cumulative impact analysis (please see Data Request 87)

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BACKGROUND

The Applicant submitted new revised air quality Tables for section 5.2 of the AFC on December 2000. Table 5.2-26.2 suggests that during the Commissioning period the hourly NO₂ ambient air quality standard may be exceeded. For past siting cases, e.g., Crockett and Pittsburg, CEC Staff has not allowed emission levels during Commissioning resulting in potential new violations of ambient air quality standards. Table 5.2-26.5 also suggests a similar situation during the operation of the emergency gas generator.

DATA REQUEST

140. Please suggest what alternatives would be acceptable to the Applicant to negate potential NO₂ total impacts above the 1-hour ambient air quality standard. Some of the options to consider are:
- a. Reduce permitted NO_x emissions during Commissioning and during the operation of the emergency gas generator, as needed;
 - b. Refine the dispersion modeling analysis (we will be glad to suggest different options);
 - c. Not allow commissioning activities during the period of time when historically NO₂ concentrations are above 310 µg/m³. This number is calculated as the difference between the 1-hour ambient air quality standard (470 µg/m³) and the maximum estimated impact during Commissioning (159.4 µg/m³).
 - d. Not allow the operation of the emergency generator during the periods of time when historically NO₂ concentrations are above 190 µg/m³, which is calculated from Table 5.2-26 as equal to 470 µg/m³ - 280 µg/m³.

BACKGROUND

The Applicant is proposing to use VOC Emission Reduction Credits (ERCs) to offset permitted PM₁₀ emission levels at a 3 to 1 ratio. However, the South Coast Air Quality Management District has not provided a technical analysis to support this ratio of the interpollutant offset idea. Even if the South Coast Air Quality Management District (SCAQMD) eventually allows this trade, there are some indications that this might not result in local mitigation from an environmental justice perspective.

ERCs are scarce not because there are not enough sources of PM₁₀ emissions that could reduce PM₁₀ emissions, but because the regulatory framework does not allow for an expeditious creation of these ERCs and because the universe of facilities that could generate these ERCs is extremely limited.

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For all these reasons, it is necessary to start the discussion on innovative non-regulatory PM10 mitigation options that could be used to provide actual mitigations for this project, if needed.

DATA REQUEST

141. Please provide a technical discussion of options that the Applicant could consider for the creation of local mitigation options. Please note that these options would not necessarily result in the creation of regulatory PM10 ERCs. Some of the options may include:

- e. Purchase and installation of PM10 control equipment for non-regulated activities;
- f. Financial support for a local air quality study (neighborhood scale) that would allow the identification of strategies to improve local air quality, if needed;
- g. Financial support for low cost medical services for the low-income groups in the affected areas;
- h. Providing a lump-sum of funds or periodic disbursements to a group representing the affected parties to be used for specific mitigation activities;
- i. Providing funds to the local schools for the extra cost required for the purchase of natural gas fueled buses (or alternative options) whenever the schools purchase new school buses up to a certain amount or for the next five or ten years;
- j. Other options.

Please note that the list of options presented above does not represent an endorsement of these options by CEC Staff. They should be used only to start the discussion on this issue.

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(00-AFC-3)**

TECHNICAL AREA: Traffic and Transportation

Author: Lance Pagel and James Fore

BACKGROUND

The purpose of the following data request is to determine, within the narrow interest of driver safety, any potential traffic impacts caused by the proposed project. The location and structural design of the project adjacent to Interstate 710 may contribute to impacts associated with driver distraction and vision impairment. These impacts include shadows cast by the structure and vapor plumes onto Interstate 710 potentially causing drivers to be temporarily blinded by a sudden change in light intensity. No textual description is given for Shadow Study Attachments 121-1 and 121-2 in the supplemental data responses. Shadows cast by vapor plumes are not included in the analysis.

DATA REQUEST

142. Please provide a textual description of the shade/shadow Attachments 121-1 and 121-2 included in Data Response 121. The description should include approximate width of shadows cast by the stacks and building as presented in both attachments.

143. Please include an evaluation and description of shadows cast by the vapor plumes from both the exhaust stack and cooling tower.

BACKGROUND

The Revised Appendix X for the Nueva Azalea Power Plant Traffic Analysis in estimating the auto trips in and out of the J. B. Hunt facility assumed that there was a ratio of 1.1 employees per car, page 20. This ratio was stated to represent the average car occupancy in Southern California. In determining the employees per car for the plant construction personnel a ratio of 1.3 employees per car was used.

DATA REQUEST

144. Please explain why two different employees per car ratios were used in the analysis.

BACKGROUND

The Revised Appendix X for the Nueva Azalea Power Plant Traffic Analysis Figure 4 (Projected Traffic Distribution) indicates the distribution of project traffic. This figure indicates that 48 percent of the traffic in and out of the plant site will travel north on Garfield Avenue, 47 percent south on Garfield and 5 percent east on southern Avenue. Table 3a (Project Traffic Generation During Construction) indicates that the project will generate 83 morning and evening peak hour trips. The impact of the peak hour trips was analyzed in Appendix B Explanation and Calculation of Intersection Capacity Utilization of the Revised Appendix X. The derived tables, Intersection Volumes, Lane and Intersection Capacity Utilization Calculation indicates the project will result in 83 peak hour trips for each intersection.

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DATA REQUEST

145. Please explain why the project traffic distribution referred to in Figure 4 was not used along with the estimated peak hour volume to determine the amount of peak volume traffic that would impact each evaluated intersection.

BACKGROUND

In estimating the number of truck drivers (page 20, Section C-Trucks Based At Facility At One Time), the following number of truck drivers is estimated to come to the facility in a day: 65 for local tractors, 75 for regional tractors and 117 for over the road tractors.

DATA REQUEST

146. It is not clear if the drivers for regional and over the road tractors represent the number of tractor drivers that come to the facility each day or is the total number of regional and over the road tractor drivers assigned to the facility.

BACKGROUND

The Nueva Azalea Power Plant has proposed a unique lighting concept for its exhaust stacks that is referred to as architecturally enchanting lighting. This lighting will provide landscape type lighting inside the mesh around the exhaust stacks to illuminate the architectural design at night. Because of the location of these stacks to I-710 and the proposed unique lighting concept, concern has been raised about driver distraction for traffic on I-710. This could be significant during the wintertime when the lighting will be more visible to rush hour traffic that will be occurring before sunrise and after sunset. If this should occur the results could be a significant increase of accidents on I-710.

DATA REQUEST

147. Please provide a traffic impact analysis of the potential for an increase in traffic accidents on I-710 as a result of the visual attraction caused by the lighting plan for the exhaust stacks.

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Technical Area: Alternatives

Author: Fritts Golden and Paul Scheuerman

BACKGROUND

Section 3.11 of the AFC (see page 3-69 and following) identifies three alternatives to the proposed South Gate site, as well as the proposed project site. The information provided on each site is in an abbreviated list format. The principal reason given for not pursuing each alternative is the inability to acquire control of the alternative site. Whether the alternatives met any of the other siting criteria is not addressed. For purposes of examining alternatives, information is required for other sites that may have been considered and rejected.

DATA REQUEST

148. Please provide to the Energy Commission the location (street address or intersection) of other sites that were considered (and discussed at the July Applicant-Staff meeting) but not included as alternatives in the AFC.
149. Explain which criteria were used to eliminate each as an alternative. Also provide information with respect to how each site met the remaining siting criteria.
150. Are there opportunities for expanded development or for redevelopment of generation facilities at existing power generation facility sites (e.g., such as Vernon)? Identify any constraints to development at existing power generation sites.

BACKGROUND

The use of water-based cooling requires access to significant amounts of water. This affects the location of power facilities relative to water supply availability.

DATA REQUEST

151. Please address the following questions: What consideration was given to cooling technologies that do not require significant volumes of water? How would this technology affect alternative site selection or operating parameters?

BACKGROUND

Pages 1-3 and 1-4 of the AFC suggest that congestion and transmission considerations were used to identify potential sites within the LA basin. (Transcript of the Informational Hearing and Site Visit, Monday, October 2, 2000, page 137) Mr. Gould stated that power would not necessarily be sold in the LA basin. While the electricity generated will be consumed locally, since electrons in a transmission grid are not going to make it to a remote consumer, sales of power outside the region would divert other power to satisfy that contract. Under this scenario, the power plant's location in the LA basin would not necessarily increase the local supply of electricity.

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DATA REQUEST

152. Please explain why it is important to locate within the LA basin and at the specified interconnection point with the transmission grid due to transmission congestion concerns or any other concerns. Explain how the Nueva Azalea site would increase the power supply to the load center/LA basin or otherwise benefit the transmission system if the power is sold elsewhere.
153. Identify the geographic area within which congestion conditions were deemed to exist and explain how the site and alternative sites relieve this condition and contribute to system reliability.

BACKGROUND

At page 3-69 of the AFC, the screening criteria for alternatives included the availability of land within "the South Path 15 (SP15) import constraint points." The AFC identifies constraints to transmission imports into the load center as important to the selection of sites. While not explicitly identified as an objective, it would appear that location within the outer limits of import constraints was an important criterion.

DATA REQUEST

154. Identify the "envelope" or geographic areas within which the constraints imposed by SP15 are avoided. (I.e., What is the geographic extent of the SP15 constraint such that a facility located within the area is not limited by this transmission constraint, while a facility outside this limit would be potentially constrained from providing power into the load center.
155. Have any other interconnection points been considered? If so, please provide the results of any studies or other analysis.

BACKGROUND

At page 3-70 of the AFC the description of the Preferred Site (as well as Site D) states that the site is located .near many SCE and Los Angeles Department of Water and Power high voltage (230kv and 220kv) lines so that interconnection possibilities are very good.

DATA REQUEST

156. Please describe the process and criteria used to choose which of the many possible facilities the project would interconnect with.

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Technical Area: Visual Resources

Author: William Kanemoto, Gary Walker

BACKGROUND

Data Request 56 asked for plans and typical architectural elevations of all proposed off-site fencing, screens, and sound walls, including the location, height, colors, materials, patterns, and other proposed design characteristics. The applicant's data response stated that the only off-site screen or wall is the proposed sound wall, and that the wall's characteristics had not been established, and the applicant's consultant was meeting with Los Angeles County Metropolitan Transportation Authority (LACMPA) as a lead agency with Caltrans as a reviewing agency. The response stated that the details had not been worked out and would need a South Gate representative's approval and cooperation before the applicant could submit a proposal back to LACMPA.

DATA REQUEST

157. Please describe the content and results of any meetings with the LACMPA regarding the sound wall.
158. Please describe the content and results of any consultation with the City of South Gate regarding the sound wall.
159. Please describe the status of a proposal to LACMPA regarding the sound wall.
160. If the proposal for a sound wall has been completed, please provide a copy. If the proposal has not been completed, please specify on a detailed map the proposed location of the sound wall, specify the height of the sound wall, and estimate the date when the proposal will be available.

BACKGROUND

Data Request 56 also asked for plans and typical architectural elevations of all proposed on-site fencing, screens, and sound walls, including the location, height, colors, materials, patterns, and other proposed design characteristics. The applicant's initial data response stated that the on-site fencing would be a woven-wire mesh, that the only screen proposed is in front of the cooling tower, and that the screen would be a louvered metal screen. The response stated that apart from the color patterns other details had not been finalized at that time. In response to staff's questions at the October 18, 2000 Data Response Workshop, the applicant later provided a written description of the architectural design philosophy for the project. However, the applicant has not yet specified the location or height of the screen proposed in front of the cooling tower.

DATA REQUEST

161. Please specify the location of proposed project fencing on a site plan and specify the height of the fencing.

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162. Please provide plans and typical elevations of the proposed cooling tower screen. If this information is not known at this time, please specify the location of the proposed screen on a site plan, specify the height of the screen, and estimate the date when the plans and elevations will be available.

BACKGROUND

At the October 18, 2000 Data Response Workshop, staff asked a number of follow-up questions regarding Data Request 71, concerning visible plumes. On November 1 the applicant provided supplemental responses to six specific questions that staff asked at the workshop, which the applicant numbered 71a through 71h. The responses to questions 71f through 71h stated that the information would be provided later. The applicant's November 10 supplemental responses provided information regarding questions 71f through 71h.

Regarding question 71b, concerning the exhaust conditions (temperature and humidity) for each hour where a plume is predicted, the response did not directly answer the question of the relative humidity, in percent, assumed for the wet/dry cooling tower exhaust.

Regarding question 71e, concerning the annual frequency of occurrence for a visible plume including and excluding nighttime and meteorological events, the data response provided a table for the exhaust stack plumes (68-2) and a table for the cooling tower plumes (71-2).

Regarding question 71h, concerning the use of inland meteorological data and related plume visibility analysis, the response stated that surface station meteorological data for Glendale/Burbank Airport and Ontario Airport had been obtained along with upper air data from Miramar. The response stated that this information was being investigated for its effects on the plume visibility predictions, and that, if warranted, additional plume visibility analyses would be submitted by approximately December 15, 2000. Staff has not received such additional analyses.

DATA REQUEST

163. Regarding Data Request 71b, please specify the relative humidity (in percent) assumed for the wet/dry cooling tower exhaust in the plume visibility analysis.

164. The response to Data Request 71b stated that the temperature of the cooling tower exhaust used in the analysis is 70F(Fahrenheit). Please confirm that this value is correct.

165. To provide more detail than was provided in Tables 68-2 and 71-2 in Data Response 71e, please provide a table for exhaust stack plumes that shows the following and a separate table for cooling tower plumes that shows the following:

- The total number of hours per year that a plume is expected to be visible;
- The percent of the total hours per year that a plume is expected to be visible;

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- The total number of daylight hours per year that a plume is expected to be visible;
- The percent of the total daylight hours per year that a plume is expected to be visible;
- The total number of daylight hours without inclement weather that a plume is expected to be visible; and
- The percent of the total daylight hours without inclement weather per year that a plume is expected to be visible.

166. Regarding question 71h, please explain whether the inland meteorological data was appropriate for use in the plume visibility analyses. If not, please explain why not. If so, please provide the additional analyses.

BACKGROUND

Data Request 75 asked for an investigation and discussion of opportunities for off-site landscape screening such as tree plantings in the vicinity of key sensitive foreground receptors, including the various residential areas near the site and motorists on the Long Beach Freeway, as well as a description of such off-site landscape screening, including plan views and depictions. The data request also asked for a description of any proposed on-site landscaping. Data Response 75 stated that the landscaping opportunities were still being discussed with the South Gate city planners, but showed suggested landscaping views in Figure 5.13-1a for the Thunderbird Mobile Home Park. Energy Commission staff have not been informed of the content or result of those discussions. However, at the October 18, 2000 Data Response Workshop the applicant promised to provide this information as well as plans and other description. The initial data response also stated that the applicant would supplement the response with an on-site landscaping plan by October 24, 2000. The applicant explained at the October 18, 2000 Data Response Workshop that the plan would be delayed, but to date staff still has not received the plan.

DATA REQUEST

167. Please describe the content and results of the applicant's discussions with the South Gate city planners regarding opportunities for off-site landscape screening.

168. Please discuss the feasibility of off-site landscape screening. If such screening is feasible, provide plans for such screening.

169. Please provide the on-site landscaping plan for the project.

BACKGROUND

At the October 18, 2000 Data Response Workshop staff asked the applicant to provide a depiction of its lighting proposal for the exhaust stacks. The applicant provided four

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seasonal depictions in the November 1, 2000 data responses. Staff also asked the applicant whether the applicant had told Caltrans about its lighting proposal. The applicant said that it had not, but that it would do so.

DATA REQUEST

170. Please describe the content and results of any discussions with Caltrans regarding the applicant's lighting proposal for the exhaust stacks.
171. Please specify whether the applicant has provided color depictions of the lighted exhaust stacks to Caltrans. If so, specify to whom the depictions were provided and describe any responses from Caltrans. Please provide copies of any new or revised depictions given to Caltrans.
172. Caltrans staff has submitted several letters and memoranda to the Energy Commission expressing concerns about the proposed lighting for the project. Please discuss whether the applicant has modified or plans to modify its lighting proposal in response to these concerns. If so, please describe any modifications.

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OUTSTANDING CEC DATA REQUESTS

- **AIR QUALITY** 87, 88, and Revised AFC Air Quality section

- **NOISE** 123

- **TRAFFIC** 110, 111, 117, 118, 119, 120, 121

- **VISUAL** 56, 71b, 71e, 71h, 75